



U.S. Department of Energy  
Energy Efficiency  
and Renewable Energy



# **Energy Policy Act of 2005**

## *Alternative Fuels and Biomass*

Alabama Agriculture Energy Conference

November 9, 2005

David Waldrop  
US DOE Southeast Region



U.S. Department of Energy  
Energy Efficiency  
and Renewable Energy



# Clean Cities *A voluntary, locally based government/industry partnership*

**Mission:** To advance the **energy, economic, and environmental** security of the U.S. by supporting local decisions to adopt practices that contribute to the reduction of petroleum consumption in the transportation sector.





# Policy Drivers for Alternative Fuels

- National security and the need to reduce oil imports and expand energy supply diversity
- Air quality: the need to reduce critical pollutants and greenhouse gas emissions
- Public Health
- Economics



## Provisions of the Energy Policy Act of 2005 (HR6) of Interest to Clean Cities

- **Sec. 706 – Joint Flexible Fuel/Hybrid Vehicle Commercialization Initiative** – Establishes a research and grant program to advance the commercialization of hybrid/flex-fuel vehicles and plug in hybrid/flex fuel vehicles. Vehicles must achieve not less than 250 miles per gasoline gallon. \$3M authorized for 2006, \$7M in 2007, \$10M in 2008, and \$20M in 2009.
- **Sec 721-723 – Advanced Vehicles Pilot Demonstration Program**  
Grant program to fund up to 30 advanced vehicle demonstration projects administered by Clean Cities.
  - **\$200M authorized** until expended



## Provisions of the Energy Policy Act of 2005 (HR6) of Interest to Clean Cities

- **Sec. 741 – Clean School Bus Pilot Program** – EPA in consultation with DOE to award grants for the replacement of pre-1991 school buses with alternative fuel or ultra-low sulfur diesel buses, and also for school bus retrofits.
- Regulations being written; Solicitation expected in Spring 2006.
- 100% of retrofit cost; 25% to 50% of replacement cost, based on emission reductions
- \$55M/year authorized through 2007
- \$TBD through 2010





## Provisions of the Energy Policy Act of 2005 (HR6) of Interest to Clean Cities

### Sec.742 Diesel Truck Retrofit and Fleet Modernization Program

- **Program** – EPA, in consultation with DOE, administers a competitive grant program for fleet modernization and retrofit of diesel trucks. Grants go to state or local governments who will allocate funds with preference for ports and other major hauling operations.
- **Cost Share:** 50% cost
- Replaced trucks must be 1998 or older
- **Authorization:**
  - 2006 - \$20M
  - 2007 - \$35M
  - 2008 - \$45M



## **Provisions of the Energy Policy Act of 2005 (HR6) of Interest to Clean Cities**

### **Sec. 791-797: Diesel Emission Reductions**

Grants and loans available to State and local government agencies and non-profit organizations for reducing emissions from diesel engines. The program focuses on replacing/retrofitting engines in non-attainment areas and would require that at least 50% of the federal program funds be used on public fleets. Legislation authorizes \$200 million per year for FY 2006 through 2010.



## **Provisions of the Energy Policy Act of 2005 (HR6) of Interest to Clean Cities**

### **SEC. 1501: Renewable Content of Gasoline**

- "Renewable Fuels Standard" (RFS) requires that gasoline sold in the U.S contain a total of 4 B gals of biofuels in 2006, increasing to 7.5 B gals in 2012.
- The RFS removes reformulated gasoline oxygenate requirements, and establishing renewable fuel credits giving refiners more flexibility.
- Allows a credit of 2.5 gallons for every gallon of ethanol produced from wastes or cellulosic (woody) biomass sources





## Tax Provisions of the Energy Policy Act of 2005 (HR6)

### Sec. 1341:

- **Alternative Motor Vehicle Credit** – 50% of the incremental cost of new dedicated AFV plus 30% if the vehicle meets certain tighter emissions standards. These credits range from \$2500- \$32,000 depending on the size of the vehicle. For non-tax paying entities, the seller of the vehicle can take the credit. Credit is effective on purchases between 01/01/2006 and 12/31/2010.
- **Fuel Economy Tax Credit** -- \$400-\$2,400 based on gains over 2002 baseline
- **Conservation Credit** -- \$250 - \$1,000 based on schedule of lifetime fuel savings



## Tax Provisions of the Energy Policy Act of 2005 (HR6)

- **Sec. 1342 – Credit for Installation of Alternative Fueling Stations** – Provides a tax credit equal to 30% of the cost of alt fuel refueling equipment, up to \$30,000 in the case of large stations and \$1,000 for home refueling appliances. For non-tax-paying entities, the seller of the fueling equipment can take the credit. Credit is effective on purchases between 01/01/2006 and 12/31/2009.
- **Sec. 1344 – Extension of Excise Tax Provisions and Income Tax Credit for Biodiesel** – Extends the current biodiesel excise tax provisions and income tax credit from 2006 to 2008.
- **Sec. 1348 – Sunset of Deduction for Clean fuel Vehicles and Certain Fueling Property.** Repeals the existing \$100,000 tax deduction for refueling property after 12/31/2005.



## THE FOLLOWING PROVISION IS INCLUDED IN HIGHWAY BILL (H.R. 3)

### **Sec. 1113: Volumetric Excise Tax Credit for Alternative Fuels**

- Provides an excise tax credit to the seller of CNG or LNG of \$0.50 per gasoline gallon equivalent (gge) for CNG or *liquid* gallon for LNG or LPG.
- **Effective:** 10/01/2006 per 09/30/2009.
- **Motor Fuel Tax Increases 10/01/2006**
  - CNG: \$0.183 up from \$0.043
  - LNG: \$0.243 up from \$0.119



## **Biomass Related Provisions of HR6**

### **Sec. 121 Low-Income Home Energy Assistance Program (LIHEAP):**

- Reauthorizes LIHEAP at a funding level of \$5.1 billion each of fiscal years 2005 through 2007. A specific provision allows purchases of renewable fuels, including biomass, to satisfy the requirements of this section

### **Sec. 202 Renewable Energy Production Incentive (REPI)**

- Modifies EPAct 1992 to extend the 1.5 cent/kWh renewable energy production tax credit to “open loop biomass” as opposed to strictly “closed loop biomass” i.e. dedicated energy crops and extended it through 2007.



## **Biomass Related Provisions of HR6**

### **SEC. 203. Federal Purchase Requirement**

- Sets goals for purchase of electricity produced from renewable sources:
  - (1) Not less than 3% in fiscal years 2007 through 2009.
  - (2) Not less than 5% in fiscal years 2010 through 2012.
  - (3) Not less than 7.5% in fiscal year 2013 and each fiscal year thereafter

### **SEC. 208. Sugar Cane Ethanol Program**

- Designed to study the production of ethanol from cane sugar, sugarcane, and sugarcane byproducts





## **Biomass Related Provisions of HR6**

### **SEC. 210. Grants to Improve the Commercial Value of Forest Biomass for Electric Energy, Useful Heat, Transportation Fuels, and Other Commercial Purposes**

- Establishes a USDA-Interior grant program to offset the cost of biomass feedstocks
- Authorizes Value-added R & D Research grants.
- Limits awards to \$500K with \$50M authorized between 2006 and 2026
- Requires results report to Congress by 10/01/2010



# Biomass Related Provisions of HR6

## **SEC. 942. Production Incentives for Cellulosic Biofuels**

- The purpose of this section is to:
- (1) accelerate deployment and commercialization of biofuels;
- (2) deliver the first 1,000,000,000 gallons in annual cellulosic biofuels production by 2015
- Directs the DOE, DOD, USDA, and the EPA to establish an incentives program to achieve this purpose



# **Biomass Related Provisions of HR6**

## **SEC. 944. Small Business Bioproduct Marketing and Certification Grants**

These grants are intended to:

- Provide working capital for marketing of biobased products
- Provide for the certification of biobased products
- Establish a bioproduct labeling program
- Limits awards to \$100K, with \$1M authorized for 2006, with authorizations through 2015 unspecified



# **Biomass Related Provisions of HR6**

## **SEC. 945. Regional Bioeconomy Development Grants**

- USDA grants to support and promote the growth and development of the bioeconomy within the region served by the eligible entity, through coordination, education, outreach, and other endeavors by the eligible entity
- Eligible entities are regional bioeconomy development associations, agricultural or energy trade associations, or Land Grant institutions that have not previously received an award under this provision
- Limits awards to \$100K, with \$1M authorized for 2006, with authorizations through 2015 unspecified



# Biomass Related Provisions of HR6

## SEC. 946. Preprocessing and Harvesting Demonstration Grants

- USDA grant to enterprises owned by agricultural producers, for the purposes of demonstrating cost-effective, cellulosic biomass innovations in--
  - Preprocessing of feedstocks, including cleaning, separating and sorting, mixing or blending, and chemical or biochemical treatments, to add value and lower the cost of feedstock processing at a biorefinery; or
  - 1-pass or other efficient, multiple crop harvesting techniques
- Up to 5/FY
- \$5M/FY Authorized from 2006 through 2010





# Biomass Related Provisions of HR6

## SEC. 947. Education and Outreach

- Establishes a USDA program of education and outreach on biobased fuels and biobased products consisting of:
  - Training and technical assistance programs for feedstock producers to promote producer ownership, investment, and participation in the operation of processing facilities; and
  - Public education and outreach to familiarize consumers with the biobased fuels and biobased products.
- \$1M/FY for FY2006 per 2010.



## Information Resources:

- Clean Cities: <http://www.eere.energy.gov/cleancities>  
Alternative fuel information, Incentives and laws, Electronic newsletters, and Information Resource databases
- DOE Biomass Program: <http://www.eere.energy.gov/biomass>
- Library of Congress: <http://thomas.loc.gov> Summaries and full text of legislation in process and law; “Printer friendly” option allows for downloading in Word for keyword searches.
- DOE Project Management Center:  
<https://www.eere-pmc.energy.gov/business.asp> Contains links to searchable databases for federal grants, cooperative agreements, loans, and business opportunities



## Information Resources:

- USDA Rural Development Offices:  
<http://www.rurdev.usda.gov/> Information on Farm Bill 9006 and Value Added grants, the Farm Service Agency, the Commodities Credit Corporation, etc.
- Database of State Incentives for Renewable Energy (DSIRE): <http://www.dsireusa.org>
- EERE Information Center: 1-877-337-3463  
[eereic@ee.doe.gov](mailto:eereic@ee.doe.gov)
- DOE-EERE Southeast Regional Office:  
<http://www.eere.energy.gov/regions/southeast/>  
404-562-0555

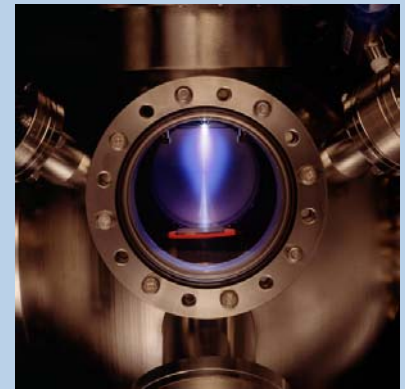


U.S. Department of Energy  
Energy Efficiency  
and Renewable Energy



# Office of Energy Efficiency and Renewable Energy

<http://www.eere.energy.gov>



*Bringing you a prosperous future where energy is clean,  
abundant, reliable, and affordable*